

Information sheet

Waste management

Defining clinical waste

This information sheet clarifies the definition of clinical waste in the Environmental Protection (Waste Management) Regulation 2000 (the Regulation) and will help determine whether clinical waste generated could be exempt from some requirements of the clinical waste management provisions in the Regulation. The Regulation does not define clinical waste generators. It only specifies certain premises that must develop clinical or related waste management plans.

Definitions

Clinical waste means waste that has the potential to cause disease, including the following:

- animal waste;
- discarded sharps;
- human tissue waste;
- laboratory waste.

Animal waste

Animal waste means any discarded materials, including carcasses, body parts, blood or bedding, originating from animals contaminated with an agent infectious to humans or from animals inoculated during research, production of biologicals or pharmaceutical testing with infectious agents¹.

Teeth, hair/fur, claws/hoooves or bone fragments are not considered to be animal body parts for the purpose of managing clinical and related waste under the Regulation.

Animals that have been put down because of old age or injury do not have to be disposed of as clinical waste. They can be disposed of through local government collection services (if pick-ups are provided) or given to the owner if requested.

Biologicals refers to preparations that are made from living organisms and their products, which are used in diagnosing, immunising or treating humans or animals. This includes, but is not limited to:

- serums;
- vaccines;
- antigens; and
- antivenins.

¹ More information on infectious agents is given in the section on human tissue waste. For a full list of infectious diseases in animals see the schedule in the *Exotic Diseases in Animals Regulation* which is available at <http://www.legislation.qld.gov.au/LEGISLTN/CURRENT/E/ExoticDisAnR98.pdf>

Discarded sharps

'Sharps' means an object or device having sharp points, protuberances or cutting edges capable of causing a penetrating injury to humans.

This waste includes discarded hypodermic, intravenous or other medical needles, Pasteur pipettes, disposable dental picks and drill bits, scalpel blades, lancets, scissors, glass slides and broken laboratory glass.

In order for an item to be defined as a sharp, it does not have to have been in contact with human blood, body fluids or an infectious agent.

However, the area of sharps generation can influence how the waste is managed for disposal. For instance, a hypodermic needle that has been used to give a patient a tetanus injection would be disposed of in a yellow coloured sharps container for clinical waste. However, a sharp generated from an oncology ward which had been used to inject cytotoxic drugs would be disposed of as cytotoxic waste into a purple-coloured sharps container and a sharp which had contained radioactive material would be disposed of into a red coloured radioactive container.

All sharps from premises generating clinical or related waste must be disposed of in a container that complies with the relevant Australian Standards.

Human tissue waste

Human tissue waste means the following -

- tissue, blood, blood products and other body fluids that are removed from a person during surgery, an autopsy or another medical procedure;
- tissue, blood, blood products and other body fluids that are removed from a person during post-operative care or treatment;
- specimens of tissue, blood, blood products and other body fluids and containers in which the specimens are kept;
- discarded material saturated with, or containing, free-flowing blood and other body fluids.

Wastes categorised as human tissue waste include discarded waste human blood, discarded waste human blood components (serum and plasma), containers of free-flowing blood or blood components, or discarded material heavily contaminated with blood or blood components (whether free-flowing or dried).

Waste human blood and its components, including expired stocks from blood banks, is considered to be clinical waste and must be managed according to the legislative requirements for clinical waste.

Human body fluids such as saliva, mucus, pleural fluid, cerebrospinal fluid, pericardial fluid and any other fluid that is visibly contaminated with blood, and all body fluids generated from circumstances where there is potential for the presence of infectious agents, are included in this category. Urine, faeces and vomitus are not generally included as clinical waste, unless they originate from a person with a known infectious disease or are visibly contaminated with blood.

However, waste items that may be slightly contaminated with dried blood should not be considered to be clinical waste by generating premises. This may include a light blood smear on a disposable gown or a spot of blood on cotton wool from a blood test.

Blocks of tissue that have been fixed for cytological and/or histological examination, in paraffin or a similar embedding material that prevents material leaching into the environment, may be discarded as general waste. The chemical fixatives used are likely to destroy any potential pathogens in the tissue block.

If managed appropriately, sanitary hygiene waste is not considered to be clinical waste, unless it has been generated in an isolation area or by a person known to have an infectious disease.

Individual premises can, however, still develop their own infection control policies for this waste, especially in consideration of the Infection Control Principles of Standard and Additional Precautions (NHMRC 1996).

Infectious agent

Infectious agent means an organism, including a micro-organism or worm, that causes disease or another adverse health impact in humans. When used under the provisions of the Regulation relating to clinical or related waste, the term *infectious agent* includes organisms that cause notifiable diseases², controlled notifiable diseases or infectious animal diseases¹, including the following:

- Amoebiasis
- Anthrax
- Australian lyssavirus (including bat lyssavirus)
- Avian influenza virus
- Bovine spongiform encephalopathy (mad cow disease)
- Brucellosis (due to *Brucella abortus* or *B. melitensis*)
- Cholera
- Colibacillosis
- Dermatophilosis
- Diphtheria
- Encephalitis
- Food poisoning in two or more associated cases, caused by:
 - Camphylobacter infection
 - E.coli infection
 - Shigella infection
 - Yersiniosis infection
- Giardia infection
- Haemophilus influenzae
- Hepatitis (A; B; C; non-A; non-B)
- Human Immunodeficiency Virus
- Legionellosis
- Leprosy
- Malaria
- Measles
- Meningitis
 - Aseptic
 - Haemophilus
 - Meningococcal
 - Other
- Mumps

² A full list of notifiable and controlled notifiable diseases can be found in the Health Regulation 1996, which is available at <http://www.legislation.qld.gov.au/LEGISLTN/CURRENT/H/HealR96.pdf>.

- Newcastle disease
- Pertussis
- Poliomyelitis
- Rubella
- Psittacosis
- Rat bite fever
- Ringworm
- Scarlet fever
- Smallpox
- Staphylococcal infection
- Streptococcal infection
- Syphilis
- Toxoplasmosis
- Tuberculosis (all forms)
- Typhoid
- Typhus (all forms)
- Yellow fever

Laboratory waste

'Laboratory waste' means a specimen or culture discarded in the course of dental, medical or veterinary practice or research, including material that is, or has been contaminated by, genetically manipulated material or imported biological material.

This waste includes cultures and stocks of infectious agents (as outlined above), and associated biologicals, cultures and stocks from medical, research or pathological laboratories, wastes from the production of biologicals, discarded live or attenuated vaccines or culture dishes, and devices used to transfer, inoculate or mix cultures.

Cultures and stocks refer to systems that are used to grow and maintain infectious agents *in vitro*. This includes, but is not limited to:

- nutrient agars, gels and broths;
- human and primate cell lines; and
- impure animal cell lines.

Culture dishes and devices used to transfer, inoculate or mix cultures refers to items that have come into contact with high concentrations of infectious agents and may include:

- plastic or glass plates, flasks, vials, beakers, jars and tubes;
- inoculation wires and loops;
- stirring devices;
- stoppers and plugs;
- filtering devices; and
- materials used to clean and disinfect items.

If you generate, transport or treat clinical waste you may be required to obtain a development approval³ and become a registered operator with the relevant administering authority. Please refer to the Department of Environment and Resource Management (DERM) information sheet *Requirement to become a registered operator to carry out certain ERAs*.

For copies of DERM supporting information, visit the website at www.derm.qld.gov.au.

Advice and support are available through a statewide network of regional DERM offices. Contact details are available on the above website and in the White Pages.

When waste is not clinical waste

- Domestic premises. In the home environment the only category of clinical and related wastes requiring special treatment is sharps or other devices used to penetrate the skin. All other wastes can be disposed of through the domestic waste stream. NH&MRC - National Guidelines for Waste Management in the Health Care Industry, March 1999.
- Emergency first-aid. Waste generated when administering emergency first-aid at accident scenes should be disposed of by using all reasonable precautions commensurate with the nature and circumstances of the situation.
- Tattooists. If the waste does not contain free-flowing blood or body fluids, it is not clinical waste. This means that waste with a small amount of dried blood (e.g. cotton wool ball with a spot of dried blood) does not have to be disposed of as clinical waste. However, any sharps must be contained within a rigid-walled, puncture-resistant container prior to disposal. The container must then be given to an approved regulated waste treatment facility via a registered transporter.
- Electrolysis. Electrolysis procedures used by beauticians to treat or remove body hair are not considered to generate clinical waste if the waste does not contain free-flowing blood or body fluids. Any sharps must be contained within a rigid-walled, puncture-resistant container prior to disposal. The container must then be given to an approved treatment facility via a registered transporter.
- Ear piercing/body piercing. This practice is not considered to generate clinical waste, unless the waste contains free-flowing blood or body fluids. However, any sharps waste must be disposed of in the same manner as for tattooists, or go to an approved treatment facility via a registered transporter.
- Waxing. Waxing procedures used by beauticians for removing body hair are not considered to generate clinical waste.
- Public areas (e.g. shopping centres, parks, beaches, hotels, restaurants, railway and bus stations, airports etc.) Sanitary hygiene waste and sharps are not considered to be clinical waste if disposed of or discarded in a public toilet or public area.
- For the purposes of management and disposal, sanitary hygiene waste from shopping centres, child care centres, family day care, public toilets, restaurants and other facilities whose primary function is not health care related is not considered to be clinical waste or nightsoil. However, as this material is considered sensitive it is strongly recommended that it is disposed of to landfill in consultation with the land fill operator.
- Animal bathing and grooming. Animal bathing and grooming services (e.g. hydrobathing and hair and nail clipping) are not considered to generate clinical waste, even if the activity is conducted at a

³ Development approvals are legally binding agreements (under the *Sustainable Planning Act 2009*) that outline the holder's commitment to protect the environment and DERM's approval of activities operating in an acceptable environmental manner.

premises generating clinical waste (such as a veterinary clinic). However, correct management practices need to be followed, particularly to manage waste water and any associated chemicals that may have been used. Sheet: Waste—De

- Facilities having animals (e.g. pet shops, kennels, pounds, theme parks). Waste generated from a pet shop, public aviary, aquarium or zoo is not considered to be clinical waste, unless the waste originated from an animal contaminated with an agent infectious to humans. This waste must then be managed as clinical waste.
- Crime scenes. Waste from the clean-up of a crime scene generally does not need to be managed as clinical waste, unless the material is heavily contaminated with free-flowing blood or body fluids, or is known to contain infectious agents.
- First aid rooms. (e.g. in schools, offices, factories) Clinical waste generated in the treatment of minor injuries (e.g. bandages, bandaids, cotton wool) is not clinical waste. However, any hypodermic needles must be placed in a rigid-walled, puncture resistant container, which can then be disposed in the general waste stream if allowed by the local government.
- Medical practitioners, dentists and vets. General waste such as tongue depressors, cotton wool balls, tissues, bandages, bandaids, protective bibs, gloves, overalls, disposable sheets, and shoe protectors with no free flowing blood, are not classed as clinical waste and can go into the general waste stream.
- Laboratories. Waste from laboratories that do not conduct testing of blood, body fluids or tissue from humans or animals is not clinical waste.

Further information

Other information sheets in this series include:

Clinical or related waste management

Clinical or related waste storage

Clinical or related waste treatment and disposal

Managing sanitary hygiene waste

Pharmaceutical and cytotoxic waste management

Waste management laws

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For copies of DERM supporting information, visit the website at www.derm.qld.gov.au.

Advice and support are available through a statewide network of regional DERM offices. Contact details are available on the above website (refer to the information sheet *Contact details for environmental licensing — including Council areas*) and in the White Pages.

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Disclaimer:

While this document has been prepared with care it contains general information and does not profess to offer legal, professional or commercial advice. The Queensland Government accepts no liability for any external decisions or actions taken on the basis of this document. Persons external to the Department of Environment and Resource Management should satisfy themselves independently and by consulting their own professional advisors before embarking on any proposed course of action.

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